

Commercial Saltwater Disposal Well Permit Application

Office of Conservation Injection & Mining Division P.O. Box 94275

Baton Rouge, LA 70804-9275

UIC-2-COM SWD

TYPE ONLY

1. Application to: ☐ Drill New Saltwater Disposal Well ☐ Convert to Saltwater Disposal Well										
2. Operator's Name and Address:			;			B. Operator Code:				
			4. Phone ()							
			WELL INFO	RMATION						
5. Propose	ed Well Name a	nd Number:	6. Serial No. (Conversion)							
7. Field:			8. Parish:				9. Sec.	Twp.	Rng.	
10. Location	on Description:									
11. Latitude: Longitude:				Louisiana L (Check One Co X:			•	ne 🗆 Sou	th Zone	
12. WELL [DATA									
Casing	Hole	Casing	Depth Set		Sacks		Туре	_	Top of	
Size	Size	Weight	Тор	Bottom		ment Cemer		t Cement		
		DI	PODOSED WELL		TION					
PROPOSED WELL INFORMATION										
13. Tubing ☐ Steel ☐ Other (Identify)						ა	ize	Dept	n	
14. Packer: ☐ Tensional ☐ Compressional ☐ Permanent			Make		Model		Depth	Set		
15. Plugged-Back Depth:			16. Drilled-Out Depth:			17.	17. Total Depth:			
-	of Proposed Di	-	: :	19. Format	ion Naı	me(s):				

20. Injection through:	□ Open Hole□ Perforations□ Screen	21. Proposed Perforated Interval: Top:Bottom:				
	PRESSURE CAL	CULATION DATA				
22. Injection Rate (gallons/m Normal:		23. Injection Fluid Expected Temp (F): Summer:Winter:				
	24. Injection Formation Properties: Estimated Measured Measured Millidarcys Millidarcys					
25. Describe contigency plan	ns for saltwater disposal wh	nen well is down:				
26. Is the proposed well loca federal government?	ated on Indian lands under t	the jurisdiction or protection of the	□ Yes □ No			
27. Is the proposed well located on State water bottoms or other lands owned by or under jurisdiction of the State? ☐ Yes						
28. Agent or contact authorized to act for the operator during processing of this Application Name: Address:						
Phone ()						
The signature below authorizes this agent or contact to submit additional information as requested and to give oral statements in support of this application.						
CERTIFICATION BY OPERATOR						
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.						
29. Name		30. Title				
31. Signature		32. Date				

COMMERCIAL SALTWATER DISPOSAL WELL PERMIT APPLICATION PROCEDURES FOR FORM UIC-2-COM SWD

- These procedures are intended to provide applicants a checklist to be sure all information is provided.
- This list applies both to new wells to be drilled as well as those to be converted to disposal--check all appropriate boxes.
- Supporting documentation will be required in the form of attachments. Label each of the attachments by number in the <u>lower right-hand corner</u>; example: "Attachment 2A"
- The permitting process is a two-step procedure:
- 1st Step: After the Application is reviewed and found to be complete and to meet the requirements of Statewide Order 29-B, an "Approval to Construct" letter will be issued. This will allow the well to be drilled and completed or to be converted as described in the Application, but <u>not</u> to inject. A list describing the "Reporting Requirements" will be included with the "Approval to Construct" letter. The "Reporting Requirements" will tell you what you need to file with the Injection & Mining Division after completion of the well and before issuance of the final well PERMIT TO INJECT.

2nd Step: The Well History, mechanical integrity test results, and logs are reviewed. If found adequate, a final "Permit" letter to inject fluids will be issued. If not adequate, the Injection & Mining Division will tell you what remedial action, if any, can be taken to obtain a "PERMIT TO INJECT".

SUBMIT THE FOLLOWING IN ORDER:

•	Application for Permit or to Amend Permit to Drill for Minerals				
	☐ For a NEW WELL, two copies of completed form MD-10-R (Yellow Card)				
	☐ For a CONVERSION, two copies of completed form MD-10-R-A (Pink Card)				
	☐ Both cards must have original signatures. The information provided must match items 1 to 11 ☐ on the Application (Form UIC-2 COM SWD).				
•	Filing Fee				
	☐ Check made payable to "Office of Conservation",				
	□ a. New Well \$631				
	□ b. Conversion \$ 757				
•	APPLICATION Commercial Saltwater Disposal Well Permit Application				
	☐ Form UIC-2 COM SWD with original ☐ signature. All items must be answered or noted "N/A"not applicable. Include pages 1 to 7 as part of the Application.				
ΑT	TACHMENT 1 Location Plat				
	☐ For a NEW WELL, include an original certified drilling location plat, labeled "Attachment 1." This plat may				

longitude and the Lambert-X & Y coordinates for the NAD 27 and the NAD 83.

be combined with Attachment 2, as long as it is a certified plat. This plat must contain the latitude and

			r a CONVERSION, include the drilling location plat, labeled "Attachment 1." It may be a photocopy. s plat may be combined with Attachment 2.		
ΑT	TAC	CHN	IENT 2 Area of Review		
		A.	An Area of Review (AOR) map, labeled "Attachment 2A." The AOR map must identify, within a one-quarter-mile (1320-ft.) radius of the proposed disposal well, the locations for the following:		
			The proposed disposal well All producing wells All disposal/injection wells All shut-in wells All plugged and abandoned wells All dry holes All source water wells (for enhanced recovery) All freshwater wells Include a legend to identify each well and to otherwise clarify the AOR map. Except for freshwater wells, only information on file with the Office of Conservation and pertinent information known to the applicant is required to be included on this map.		
		B.	An "Area of Review Well List" (Attachment 2B) that identifies all wells in the AOR except freshwater wells . Use the enclosed Attachment 2B or you may make up your own list, as long as all the information is included; label the list, "Attachment 2B". If no wells are found within the AOR indicate with "no wells found" on "Attachment 2B".		
		C.	A "Freshwater Well List" (Attachment 2C) identifying the freshwater wells within the AOR. Each freshwater well shall be identified by owner, type of well, and status of well. If unclear on the AOR map (Attachment 2A), also describe how each freshwater well can be located in the field. Use the enclosed Attachment 2C or you may make up your own list, as long as all the information is included; label the list, "Attachment 2C". If no fresh water wells are found within the AOR, indicate with "No wells found" on "Attachment 2C". A DILIGENT SEARCH MUST BE ATTEMPTED TO LOCATE ALL FRESHWATER WELLS WITHIN THE AOR.		
		D.	Include a laboratory analysis of a water sample from EACH freshwater well, if obtainable, labeled "Attachment 2D", "Attachment 2E", "Attachment 2F", etc. for each freshwater well. The analysis sheet(s) must identify \square the freshwater well sampled, and, at a minimum, include measurement of:		
			 □ Chloride (mg/1) □ Total Dissolved Solids (mg/1) □ Total Petroleum Hydrocarbons □ Heavy Metals (Arsenic, Chromium, Zinc, Mercury, Barium, Lead, Cadmium, Silver, Selenium) 		
		Pro	ovide an explanation if samples are not obtainable.		
ΑT	ATTACHMENT 3 Well Schematic Diagram				
			NEW WELL , two attachments are required: A schematic diagram of the proposed well, labeled ment 4A".		
		Αv	work prognosis describing the sequence of work to be performed, labeled "Attachment 4B",		

	Fo	r a (CONVERSION, three attachments are required:
		A s	schematic diagram of the well as it currently exists (before conversion to disposal), labeled "Attachment"
		A s	. schematic diagram of the well as it is proposed to be completed, labeled "Attachment 4B", work prognosis describing the sequence of work to be performed, labeled "Attachment 4C",
		hen owi	natic diagram(s) must match items 12 \square to 21 \square on the Application (Form UIC-2 COM SWD) and showng:
	A.	Su	rface equipment:
			Well head Pressure gauges Flow line diameters at wellhead Monitoring equipment, if used
В.	Su	bsu	rface equipment:
		1.	All casing strings: ☐ Diameter ☐ Weight (per foot) ☐ Depth set (top and bottom) Surface casing must extend at least 100 feet below the USDW.
		2.	☐ Hole (drill bit) diameters
		3.	Cement specifications: ☐ Type of class ☐ Number of sacks ☐ Tops of cement (indicate whether calculated/logged, or to be logged)
		4.	Proposed cement squeeze(s), if any: ☐ Type or class ☐ Number of sacks ☐ Calculated top of cement (to be logged)
		5.	Injection tubing: □ Diameter □ Type or material □ Depth
		6.	Packer: ☐ Type ☐ Depth set: Packer must be set no higher than 150 feet above the top of the injection zone. Proof of isolation (bonded cement) of the Top of Injection Zone must be at or above the packer.
		7.	Proposed disposal zone (see notes for Attachment 7): ☐ Top ☐ Bottom
		8.	Proposed initial perforated interval: □ Top □ Bottom

		9. Depths (where applicable): ☐ Total Depth ☐ Drilled-out depth ☐ Plugged-back depth
ΑT	TA	CHMENT 4 Disposal Fluid Analysis
	"At	aboratory analysis of a representative sample of the fluid to be injected in the proposed well, labeled tachment 6". The analysis sheet must indicate the source \Box of the sample and, at a minimum, include easurement of :
		Chloride (mg/l) Total Dissolved Solids (mg/l) Specific gravity or density (g/cc or ppg) Temperature or sample when specific gravity was measured
ΑT	TA	CHMENT 5 Electric Logs
		copy or continuous folded photocopy of an electrical log. The log must be complete from the log heading depth logged: the 5-inch/100-ft-scale portion is not necessary.
	Th	e Serial Number of the well must be written on the log.
•	the ma sea use	r a NEW WELL, the log should be of a nearby well if available. The log should be shallow enough to show a base of the USDW and deep enough to show the proposed disposal zone. Logs of more than one well by be included, if necessary, to show both the lowermost USDW and proposed disposal zone. A diligentarch must be made to locate at least one log within two miles of the proposed well. If a log is not available a sheet of paper labeled, "Attachment 7" which states, "No well logs are available within a two-mile radius the proposed well".
•		r a CONVERSION, the log should be of the proposed well itself. If the lowermost USDW was not logged lude a log of a nearby well that shows the lowermost USDW.
Inc	dicat	te the following <u>on each</u> log:
	A.	The base of the lowermost Underground Source of Drinking Water (USDW).
		The USDW can be determined by the deep induction curve, generally the dotted curve, on the electric log Since resistivity changes with temperature and, therefore, depth, an approximate rule that can be followed to determine the lowermost USDW is:
		3 ohms from surface to 1000 feet; 2 ½ ohms from 1000 feet to 2000 feet; 2 ohms below 2000 feet.
		That is, all sands that indicate higher resistivities than these are considered to be USDW's. Clay or shale intervals with resistivities higher than these are not considered USDW's.
	В.	The top and bottom of the proposed disposal zone.
		A zone consisting of multiple sands may be permitted, provided USDW's and sands capable of

hydrocarbon production are isolated. This will generally allow additional sands for future disposal that can be approved by work permit (UIC-17) as the need occurs. The zone requested must be <u>completely isolated</u> above and below by cement outside the perforated casing. <u>In the instance of constructing a well having casing within the injection casing, in order to comply with the two string casing requirement, cement bond must be proven (Cement Bond Log) on the outer casing string prior to running the <u>inner string of casing.</u></u>

☐ C. The proposed initial perforated interval.

ATTACHMENT 6 -- Well History and Work Resume Report

Ш	For a CUNVERSION , a photocopy of <u>each</u> vivell history and vvork resume report (Form vvH-1) that have
	previously been filed with the Office of Conservation.
	promotion, accommon man and conservation.

□ For a NEW WELL, there is no Attachment 6, unless the "NEW" well is a reentry of a well that has been plugged and abandoned. In this case the WH-1 of the P & A'd well must be submitted as Attachment 6.

The above constitutes an "original" application. <u>Also include a photocopy of all of the above</u>. Both the "original" and the "photocopy" <u>must</u> be included to be considered a complete Application.